

# Work Order ID 59941

Thursday, June 17, 2010 2:20:25 PM



Page 1

Item ID: D3564-11

Accept



Setup Start



Revision ID:

Stop



Item Name: Wearshoe

Start Date: 6/17/2010 Start Qty: 12.00



Cust Item ID:

Required Date: 6/25/2010 Req'd Qty: 12.00



Customer:

Reference:

Run Start



Approvals: Process Plan: MF

Date: 10-6-18

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

Draw Nbr

Revision Nbr

D3564

Rev D

100

0.00



FLOW WATER JET

0.00

Waterjet

Memo

FLOW CNC Waterjet

1-Cut as per Dwg D3564 \*\*\*\*\* (D3564-1F) \*\*\*\*\* □ Dwg Rev: D □ Prog

Rev: D □ 2-Deburr if necessary

10-6-21

13

110

QC2- Inspect parts off machine FAI/FAIB

0.00



0.00

QC

Memo

Quality Control

10-6-21

120

QC8- Inspect parts - second check

0.00



0.00

QC

Memo

Quality Control

8.10.10/121

13

W/O:			WORK ORDER CHANGES					
DATE	STEP		PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:			WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP		Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
				Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 59941

Thursday, June 17, 2010 2:20:25 PM



Page 2

Item ID: D3564-11

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Setup Start



Revision ID:

Stop



Item Name: Wearshoe

Start Date: 6/17/2010 Start Qty: 12.00



Cust Item ID:

Required Date: 6/25/2010 Req'd Qty: 12.00



Customer:

Reference:

Run Start



Stop



Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

130



Brake NC

NC BRAKE

0.00

Memo

0.00

Brake NC

Deburr if necessary ☐ Form on Brake as per Dwg D3564 using Jigs DT8179

SB 10/06/25

13

140



QC

QC5- Inspect part completeness to step on W/O

0.00

Memo

0.00

Quality Control

SB 10/06/25

X13

150



Large Fab

Large Fab

0.00

Memo

0.00

Large Fab

Qty Description Batch ☐ A/R 2059B Hardcoat  
M14705 ☐ Weld hardcoat as per Dwg D3437

SB 10-6-25

X13

W/O:			WORK ORDER CHANGES					
DATE	STEP		PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

# Work Order ID 59941

Thursday, June 17, 2010 2:20:25 PM



Page 3

Item ID: D3564-11

Accept



Setup Start



Revision ID:

Stop



Item Name: Wearshoe

Start Date: 6/17/2010 Start Qty: 12.00



Cust Item ID:

Required Date: 6/25/2010 Req'd Qty: 12.00



Customer:

Reference:

Run Start



Stop



Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

160

QC10- Inspect visual per QSI004- ground welds

0.00



QC

Memo

0.00

8/10/6/28

Quality Control

170

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

8/10/6/28

Quality Control

(X13)

180

Grey Sandtex(Ref:4.3.5.6) per QSI005 4.3

0.00



Powdercoat

Memo

0.00

11/12588

START TIME:

1:10

OVEN TEMPERATURE:

320° FINISH TIME:

1:40

Powder Coating

B BK 10-6-08.

W/O:			WORK ORDER CHANGES					
DATE	STEP		PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 59941

Thursday, June 17, 2010 2:20:25 PM



Page 4

Item ID: D3564-11

Accept



Setup Start



Revision ID:

Stop



Item Name: Wearshoe

Start Date: 6/17/2010 Start Qty: 12.00



Cust Item ID:

Required Date: 6/25/2010 Req'd Qty: 12.00



Customer:

Reference:

Run Start



Stop



Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

190

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

10 06 28 (13)

200

Identify as per dwg & Stock Location: FP-19

0.00



Packaging

Memo

0.00

Packaging

10/06/29

13

210

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

10/06/29

10/06/29

W/O:			WORK ORDER CHANGES					
DATE	STEP		PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

Thursday, June 17, 2010 2:20:24 PM

Page 1

Work Order ID: 59941



Parent Item: D3564-11



Parent Item Name: Wearshoe

Start Date: 6/17/2010

Required Date: 6/25/2010

Start Qty: 12.00

Required Qty: 12.00

Comments: IPP Rev:A New Issue 07-03-08 ec  
 IPP Rev:B As per Rev C 07-07-09 JLM  
 IPP Rev:C As per Rev D 07-09-09 JLM Verified By:EC  
 IPP Rev:D Comments revised on Step 5, 6 per B44656 09-02-06 KJ  
 Verified By:

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M304S16GA		Purchased	No			100	sf	109.5000	1.41	17.81053	18.4		



304/316 Sheet .063



1810-6-21

Location	Loc Qty	Loc Code
MAT	109.5	
111323	0	
114799	109.5	

114799

13

W/O:			WORK ORDER CHANGES					
DATE	STEP		PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

DART AEROSPACE LTD		Work Order: 59941
Description: Wearshoe		Part Number: D3564-11
Inspection Dwg: D3564	Rev: D	Page 1 of 1

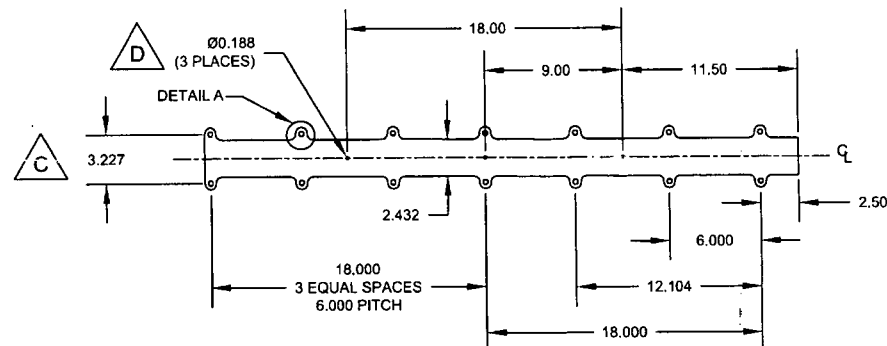
### FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

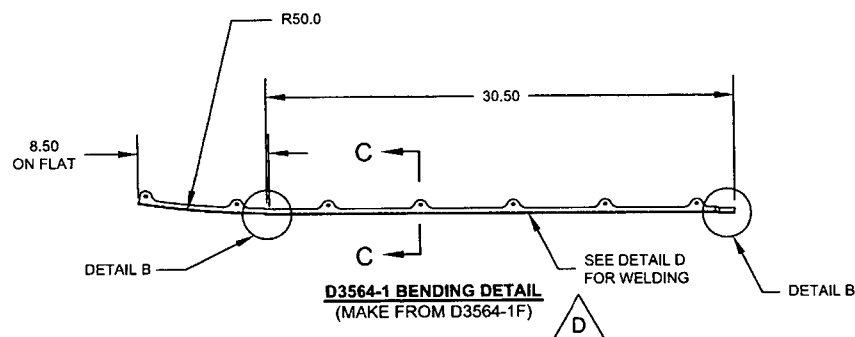
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
3.227	+/-0.010	3.222	✓			
2.432	+/-0.010	2.446	✓			
2.50	+/-0.030	2.50	✓			
6.000	+/-0.010	6.000	✓			
12.104	+/-0.010	12.104	✓			
18.000	+/-0.010	18.000	✓			
18.00	+/-0.030	18.00	✓			
9.00	+/-0.030	9.00	✓			
11.50	+/-0.030	11.50	✓			
0.300 x 0.300	+/-0.010	301 x 302	✓			
Ø0.188	+0.005/-0.001	.189	✓			
R0.375	+/-0.010	.375	✓			
0.063	+/-0.010	.061	✓			

Measured by: IB	Audited by: S	Prototype Approval:	N/A
Date: 10-6-21	Date: 10/6/21	Date:	N/A

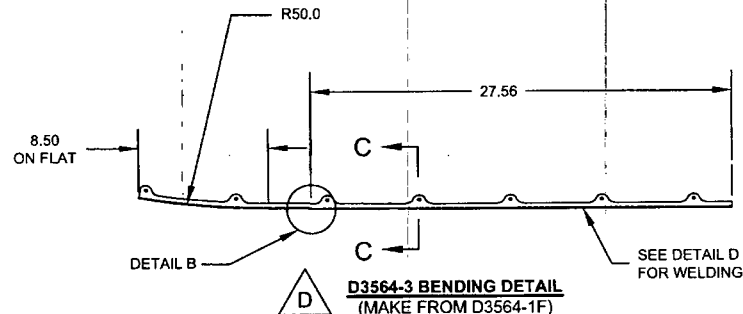
Rev	Date	Change	Revised by	Approved
A	07.09.06	New Issue	KJ/JLM	
B	07.11.23	Dwg Rev updated	KJ/EC/DD	



**D3564-1F FLAT PATTERN**



**D3564-1 BENDING DETAIL  
(MAKE FROM D3564-1F)**



**D3564-3 BENDING DETAIL  
(MAKE FROM D3564-1F)**

**D3564-1/-3/-5/-7/-9/-11/-13/-15 WEARPLATE NOTES:**

- 1) MATERIAL: AISI 304/316 SS SHEET PER AMS 5513 OR AMS 5524, 16 GAUGE (0.063 THICK)  
(REF DART MATERIAL SPEC M304S16GA)
- 2) FINISH: POWDER COAT GREY SANDTEX (REF 4.3.5.6) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.015 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: SEE TABLE IN ZONE A3
- 8) WELD PER DART QSI 004
- 9) SEE PG 3 FOR SECTIONS AND DETAILS
- 10) PARTS ARE SYMMETRIC ABOUT C

WEIGHTS:	
D3564-1	1.85 lbs
D3564-3	1.85 lbs
D3564-5	1.93 lbs
D3564-7	1.26 lbs
D3564-9	1.85 lbs
D3564-11	1.85 lbs
D3564-13	0.38 lbs
D3564-15	0.80 lbs

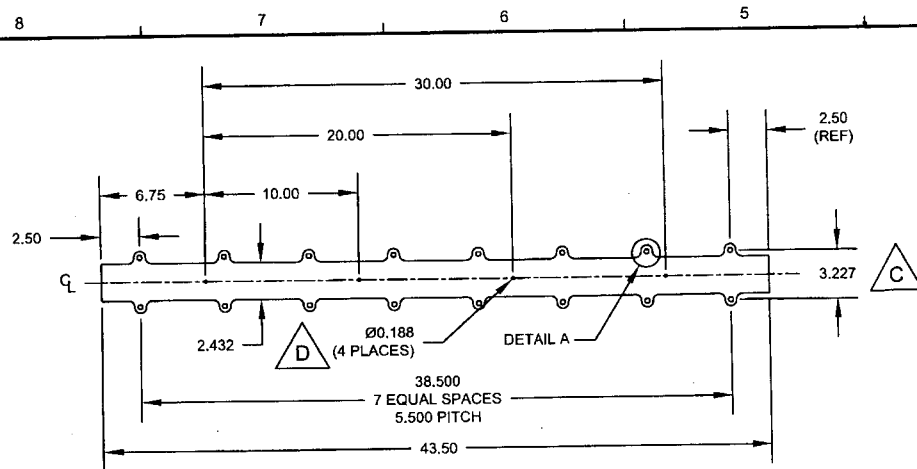
D	UPDATE DRAWING TEMPLATE; CHANGE ALL (TYP X PLS) TO (X PLACES); PG1 A8: UPDATE NOTES; PG1 A8, PG3 B5,C5: ADD D3564-15; PG1 B6,B3: D3564-1/-3 WAS ONE FIGURE; PG2 A7,A3: D3564-9/-11 WAS ONE FIGURE; PG2 A7,A3: D3564-9/-11 WAS ON PG1; PG3 B8,C8: D3564-13 WAS ON PG2; PG3 D2: WELDING DETAIL WAS ON PG1 PG3 A5,7,B2: RELOCATE DETAILS AND SECTION; PG3 A5,7,B2: INCREASE DETAIL AND SECTION SIZE	CB	07.08.21
C	MOVE TAB OUTBOARD, DETAIL A	PH	07.04.17
B	ADD AMS 5513 AND AMS 5524	PH	07.03.20
A	NEW ISSUE	PH	06.12.18
REV.	DESCRIPTION		BY DATE

DESIGN	PH	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	CB		
CHECKED	PH	DRAWING NO.	REV. D
MFG. APPR.	PH	D3564	SHEET 1 OF 3
APPROVED	PH	TITLE	SCALE
DE APPR.	PH	WEARSHOE	1:8
DATE	07.08.21	COPYRIGHT © 2006 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

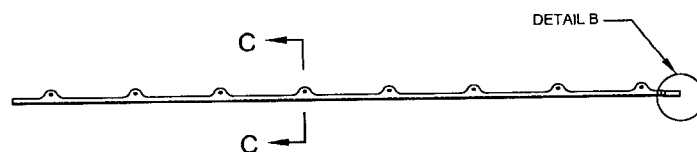
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07.09.04

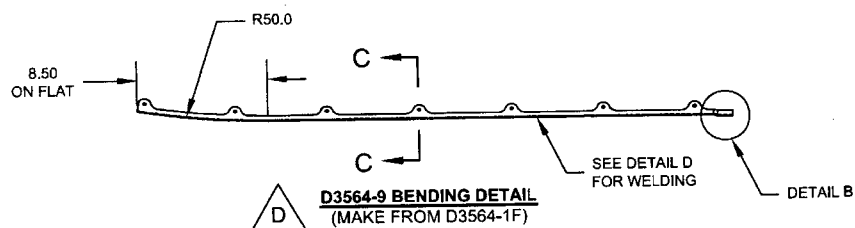
#59941



**D3564-5F FLAT PATTERN**

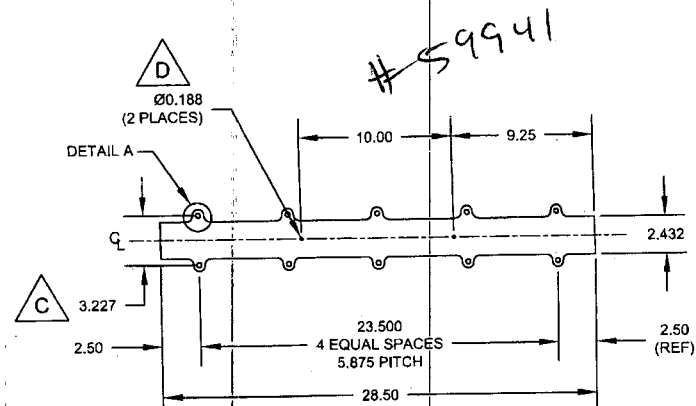


**D3564-5 BENDING DETAIL**  
(MAKE D3564-5 FROM D3564-5F)

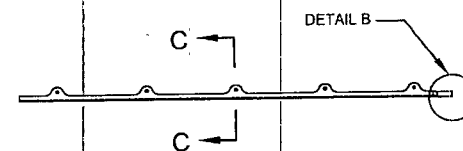


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(MAKE FROM D3564-1F)

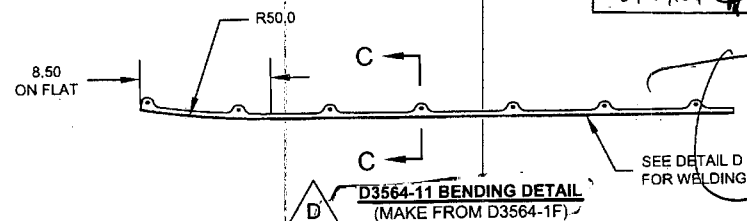
SEE DETAIL D FOR WELDING



**D3564-7F FLAT PATTERN**



**D3564-7 BENDING DETAIL**  
(MAKE D3564-7 FROM D3564-7F)



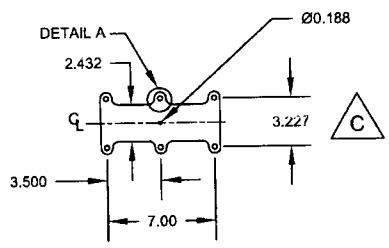
**D3564-11 BENDING DETAIL**  
(MAKE FROM D3564-1F)

RELEASED  
07.09.04

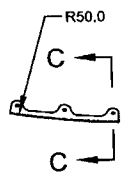
SEE DETAIL D FOR WELDING

DESIGN	PH	<b>DART AEROSPACE LTD</b>	
DRAWN	CB	HAWKESBURY, ONTARIO, CANADA	
CHECKED	PH	DRAWING NO.	REV. D
MFG. APPR.	PH	D3564	SHEET 2 OF 3
APPROVED	PH	TITLE	SCALE
DE APPR.	PH	WEARSHOE	1:8
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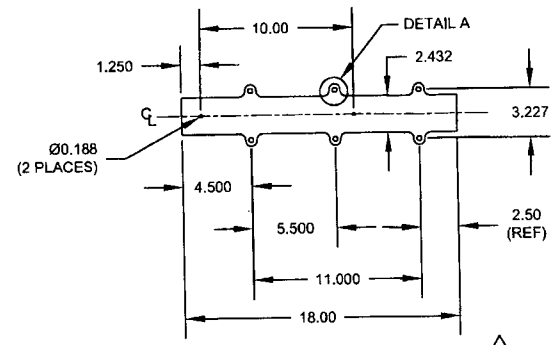
8 7 6 5 4 3 2 1



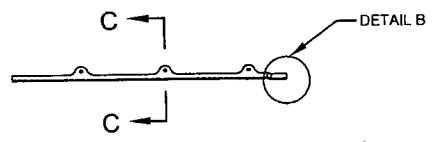
**D3564-13F FLAT PATTERN**



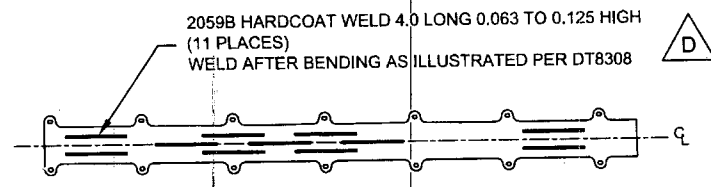
**D3564-13 BENDING DETAIL**  
(MAKE D3564-13 FROM D3564-13F)



**D3564-15F FLAT PATTERN**



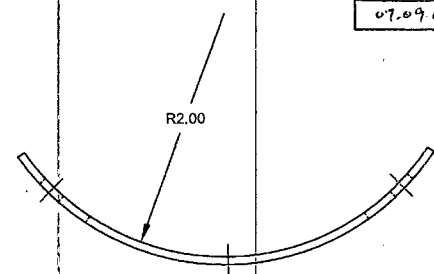
**D3564-15 BENDING DETAIL**  
(MAKE D3564-15 FROM D3564-15F)



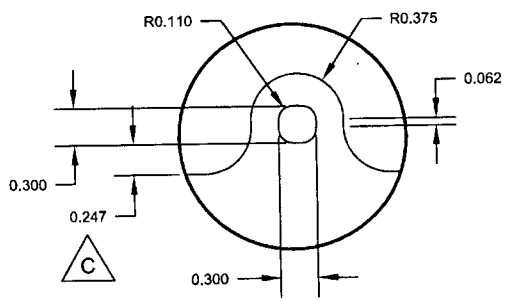
**DETAIL D**  
(D3564-1/3/-9/-11 WELDING DETAIL)

#59941

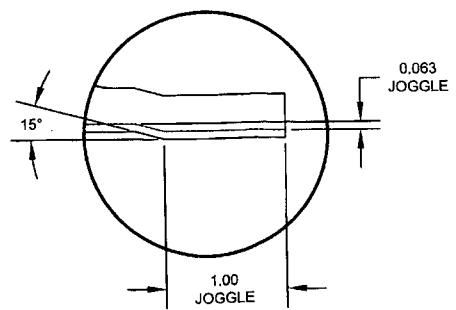
RELEASED  
07.09.04



**SECTION C-C**  
SCALE 1:1



**DETAIL A**  
SCALE 1:1



**DETAIL B**  
SCALE 1:1

DESIGN	PH	<b>DART AEROSPACE LTD</b>	
DRAWN	CS	HAWKESBURY, ONTARIO, CANADA	
CHECKED	PH	DRAWING NO. D3564	REV. D
MFG. APPR.	PH		SHEET 3 OF 3
APPROVED	PH	TITLE WEARSHOE	SCALE 1:8
DE APPR.	PH		
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8 7 6 5 4 3 2 1